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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,733	01/17/2006	Yuichiro Ogawa	Q92702	9813
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EXAMINER				
MAKI, STEVEN D				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/564,733

Applicant(s)

OGAWA, YUICHIRO

Examiner

Steven D. Maki

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

- 1) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2) Claims 6-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 6, there is no antecedent basis for "the electrically conductive bands".

Applicant argues that antecedent basis is provided by "at least one tread layer consisting of a tread rubber made of a low-conductive rubber and an electrically conductive band" and "at least two layers as the tread layer". Applicant is incorrect because "at least two layers as the tread layer" is consistent with either one band or two bands.

Claims 7-12 are indefinite because the step(s) recited in claims 7-12 fail to produce the tire of the preamble. For example, there is no mention of the belt after the description of "the method comprising" in claims 7, 11 and 12. Therefore, it is unclear if (1) claims 7, 11 and 12 fail to require a belt, (2) claims 7, 11 and 12 require the "tire raw member" to have the belt or (3) claims 7, 11 and 12 require another step of disposing a belt on the tire raw member. Another example: It is unclear if claim 7 requires a step of winding a low-conductive continuous rubber ribbon circumferentially plural times. The preamble indicates that such a step is required whereas the body of the claim (after "the method comprising") indicates that such a step is not required. Another example: It is unclear if claim 8 requires a "high-conductive thin annular sheet". The preamble

indicates that such subject matter is required whereas the body of the claim (after "the method comprising") indicates that such subject matter is not required.

Applicant argues that breadth of claims should not be equated with indefiniteness. This argument is off point and does nothing to clarify the scope of claims 7-12.

3) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Japan 525

5) **Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Japan 525 (JP 2001-047525).**

See figures, abstract and machine translation. The claimed belt reads on belt 13; the claimed continuous low conductive continuous rubber ribbon circumferentially wound plural times reads on the cap 4C which is formed by winding a sheet shaped member 4 plural times; and the claimed high conductive thin annular rubber sheet reads

on the thin high conductivity rubber composition layer E. The plural layers of cap 4C are best seen in figure 2. The term "ribbon" fails to require a width different from the width of the sheet shaped member 4. See MPEP 2113 (product by process claims).

As to claim 8, the claimed method is anticipated by Japan 525. The only step required by claim 8 is "circumferentially winding a continuous low-conductive uncured rubber ribbon". Japan 525 discloses this step. See figures 1 and 2.

Applicant argues that rubber composition E is not a thin annular rubber sheet because rubber composition E is formed by making a break that is filled with liquefied cement. This argument is not persuasive. First: Claim 8 fails to require a thin annular rubber sheet. The step of "circumferentially winding a continuous low-conductive uncured rubber ribbon" fails to form a thin annular rubber sheet. The description of "thin annular rubber sheet" in the preamble relates to intended use of the claimed method step. Claim 8 fails to recite any step which provides / forms a thin annular rubber sheet. Second: Claim 8 fails to exclude making a thin annular rubber sheet using liquid cement (solution of unvulcanized rubber). Third: Layer E comprises rubber. Layer E is annular. Layer E is thin so as to constitute a sheet. Applicant has presented no convincing argument and/or evidence to the contrary.

Japan 713

6) **Claims 2 and 4-6 are rejected under 35 U.S.C. 102(a) as being anticipated by Japan 713 (JP 11-129713).**

See figures 3, 4, abstract and machine translation. Japan 713's tire (tire size 195/65R14) inherently has the claimed belt.

Applicant argues and examiner agrees that the conductive rubber layer in Japan 713 only extends through the tread part. Examiner adds that claims 2 and 4-6 read on the electrically conductive band only extending through the tread rubber.

Applicant argues that the conductive rubber layer of Japan 713 does not extend over part of a top face of the first tread portion toward a part of a bottom face of a second tread rubber. This argument is not commensurate in scope with the claims and is therefore not persuasive. Claim 2 fails to require the electrically conductive band to extend over a part of a top face of the tread rubber. It is noted that Japan 713's conductive member extends from a part of a top face of the first tread rubber 1 because (1) the conductive member abuts the first tread rubber 1 (Figure 3) and (2) the upper corner of the conductive member is at one edge ("a part") of the top face of the first tread rubber 1 (Figure 3).

Applicant argues that Japan 713 does not teach "the tread rubber is made of a low-conductive continuous ribbon" as in claim 6. This argument is not persuasive since claim 6 fails to require "the tread rubber is made of a low-conductive continuous ribbon".

Koyama et al

7) Claims 2, 3, 5, 7-9, 11 and 12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Koyama et al (US 2002/0007893).

Koyama et al discloses a method for producing a tread comprising providing tire material 4 on a rotating support 3; winding a first portion 8a of low electrically conductive rubber on the tire material 4; winding high electrically conductive rubber ribbon 10 to

form an electrically conductive layer 9; and winding a second portion 8b of low electrically conductive rubber. The ribbon 10 may be wound only once such that it is inclined (figure 3b, paragraph 46). The ribbon 10 may be wound plural times (Figure 2, 3c, 3d, 4, 5). The low electrically conductive rubber may be formed by winding a ribbon as an alternative to winding an integral shaped body (paragraph 53). The outer surface of the tire material may be defined by a belt cord coating layer 6. The tread may have a cap base structure (figure 4).

The claimed tire and method are anticipated by Koyama et al's tire and method of making a tire. In any event: It would have been obvious to form a tire by spirally winding a ribbon of low electrically conductive rubber on a tire material to form a first tread portion, then winding a thin ribbon of high electrically conductive rubber only once on the first tread portion to form an electrically conductive rubber layer; and then winding a ribbon of low electrically conductive rubber on the thin high electrically conductive ribbon and the tire material such that the conductive layer is inclined at an angle with respect to the equatorial plane as shown in figure 3b since (1) Koyama et al teaches that the high electrically conductive ribbon 10 may be wound only once such that it is inclined (figure 3b, paragraph 46) and (2) Koyama et al teaches that the low electrically conductive rubber may be formed by winding a ribbon as an alternative to winding an integral shaped body (paragraph 53). With respect to the belt, Koyama et al teaches that 6 may be a belt cord coating layer made of high electrically conductive rubber. In claim 5, "tread layer is arranged as at least an inner most layer" reads on a single layer tread.

Applicant argues that Koyama et al's electrically conductive layer is made by twisting a rubber ribbon rather than a thin annular rubber sheet. This argument is not persuasive. First: Koyama et al fails to teach "twisting" the rubber ribbon. Second: In claims 2-12, "thin annular rubber sheet" reads on the thin annular rubber sheet formed by winding rubber ribbon 10. It is emphasized that applicant obtains the "annular" form using the same step of winding as disclosed by Koyama et al. It is undisputed that Koyama et al's ribbon 10 comprises rubber. It is noted that "thin" is a relative term that fails to require a thickness different from that disclosed by Koyama et al. It is further noted that "sheet" is generic to ribbon. A "ribbon" is a narrow sheet.

As to claim 2, applicant argues that Koyama et al's electrically conductive layer extends generally in the radial direction. This argument is not persuasive since Koyama et al's electrically conductive layer extends over a widthwise region. See Figure 3b.

As to claim 2, applicant argues that the electrically conductive band of the present invention ensures the electrical contact. This argument is not persuasive. First: Unexpected results cannot overcome a 102 rejection. Second: The claimed invention has not been compared with Koyama et al. No unexpected results over Koyama et al have been shown.

As to claim 7, applicant argues that the thickness of the electrically conductive band in the widthwise direction can be optimized by adjusting the thickness of the sheet to be wound. This argument is not persuasive since claim 7 fails to require adjusting the thickness of the sheet to be wound.

As to claim 7, applicant argues that the electrically conductive band exceeds the side face of the tread rubber and widely exposing on the top face and bottom face of the tread layer. This argument is not persuasive since claim 7 fails to require the electrically conductive band exceeding the side face of the tread rubber and widely exposing on the top face and bottom face of the tread layer.

As to claim 8, applicant argues that the deterioration of the uniformity due to the joint portion on the periphery can be prevented and the production is possible in a multi-sized production system. This argument is not persuasive. First: Unexpected results cannot overcome a 102 rejection. Second: The claimed invention has not been compared with Koyama et al. No unexpected results over Koyama et al have been shown.

8) Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koyama et al (US 2002/0007893) in view of Japan 713 (JP 11-129713).

As to claim 4, it would have been obvious to one of ordinary skill in the art to incline the high electrically conductive band (figure 3b) at an angle of 45-75 degrees with respect to the equatorial plane in view of Japan 713's teaching to incline an high electrically conductive rubber member extending through a low electrically conductive rubber tire tread at a relatively large angle (illustrated angle of 70 degrees in figure 4).

As to claim 5, it would have been obvious to form a two layer tread having an electrically conductive band extending there through using Koyama et al's process since (1) Koyama et al, directed to an anti-static tire, teaches that the tread may have two

layers (figure 4) and (2) Japan 713, also directed to an anti-static tire, teaches extending an electrically conductive layer through both layers of a two layer tread (figure 3).

9) Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koyama et al (US 2002/0007893) in view of Japan 713 (JP 11-129713), Calvar et al 233 (US 6,951,233) and Calvar et al 693 (US 6,834,693).

As to claim 6, it would have been obvious to form a two layer tread having an electrically conductive band extending there through using Koyama et al's process since (1) Koyama et al, directed to an anti-static tire, teaches that the tread may have two layers (figure 4) and (2) Japan 713, also directed to an anti-static tire, teaches extending an electrically conductive layer through both layers of a two layer tread (figure 3).

Furthermore, it would have been obvious to form two electrically conductive bands instead of one since Calvar et al 233 and Calvar et al 693 suggest separately forming the cap and base (the two layers) in which each of these layers has an electrically conductive rubber member extending there through.

10) Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koyama et al (US 2002/0007893) in view of Europe 397 (EP 1201397).

As to claim 10, it would have been obvious to one of ordinary skill in the art to use a calendar to form the conductive rubber ribbon 10 since Europe 397, also directed to strip winding a tire tread, suggests using a calendar to form a rubber tape for strip winding so that the desired thickness can be obtained.

Remarks

11) Applicant's arguments filed 7-28-08 have been fully considered but they are not persuasive. Applicant's arguments are addressed above.

The certified English translation of applicant's priority document filed 7-28-08 has been received. Accordingly, the 102(a) rejection over Japan 713 (JP 11-129713) has been withdrawn.

12) No claim is allowed.

13) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven D. Maki/
Primary Examiner, Art Unit 1791

Steven D. Maki
November 11, 2008